SEQUENCE LISTING

<110> SOLOMON, Beka
      FRENKEL, Dan

<120> IMMUNIZATION AGAINST AMYLOID PLAQUES USING DISPLAY TECHNOLOGY

<130> SOLOMON=2A

<140> US 09/473,653
<141> 1999-12-29

<150> US 60/152,417
<151> 1999-09-03

<160> 26

<170> PatentIn version 3.0

<210> 1
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<212> PRT
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<220>
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<400> 1

Glu Phe Arg His
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<210> 2
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Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1   5   10   15

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Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln Lys
1   5   10   15

1

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Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile Ile
              20                  25                  30

Gly Leu Met Val Gly Gly Val Val Ile Ala Thr
          35                  40


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Trp Val Leu Asp
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<212>   DNA
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Gln Val Lys Leu Gln Glu Ser Gly Ala Glu Leu Val Arg Pro Gly Val
1               5                   10                  15

tca gtg aag att tcc tgc aag ggt tct ggc tac aca ttc act gat tat        96
Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Asp Tyr
              20                  25                  30

gct atg cac tgg gtg aag cag agt cat gca aag agt cta gag tgg att       144
Ala Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu Glu Trp Ile
          35                  40                  45

gga gtt att agt act tac tat ggt gat gct agc tac aac cag aag ttc       192
Gly Val Ile Ser Thr Tyr Tyr Gly Asp Ala Ser Tyr Asn Gln Lys Phe
      50                  55                  60

aag ggc aag gcc aca atg act gta gac aaa tcc tcc agc aca gcc tat       240
Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65                  70                  75                  80

atg gaa ctt gcc aga ctg aca tct gag gat tct gcc atc tat tac tgt       288
Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile Tyr Tyr Cys
                  85                  90                  95

gca aga ggg gct act atg tcc tac ttt gac tac tgg ggc caa gtg acc       336
Ala Arg Gly Ala Thr Met Ser Tyr Phe Asp Tyr Trp Gly Gln Val Thr
              100                 105                 110
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2

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acg gtc acc gtc tcc tca ggt gga ggc ggt tca ggc gga gtt ggc tct    384
Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Val Gly Ser
        115             120             125

ggc ggt ggc gga tcg gac atc gag ctc act cag tct cca gca atc atg    432
Gly Gly Gly Gly Ser Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met
        130             135             140

tct gca tct cca ggg gag aag gtc acc atg acc tgc agt gcc agc tca    480
Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser
145             150             155             160

agt ata agt tac atg cac tgg tat cag cag aag cca ggc acc tcc ccc    528
Ser Ile Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Thr Ser Pro
                165             170             175

aaa aga tgg att tat gac aca tcc aaa ctg gct tct gga gtc cct gct    576
Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ala
                180             185             190

cgc ttc agt ggc agt ggg tct ggg acc tct tat tct ctc aca atc agc    624
Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser
        195             200             205

agc atg gag gct gaa gat gct gcc act tat tac tgc cat cag cgg agt    672
Ser Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys His Gln Arg Ser
        210             215             220

agt tac cca ttc acg ttc gga ggg ggg gcc aag ctg gaa ata aaa       717
Ser Tyr Pro Phe Thr Phe Gly Gly Gly Ala Lys Leu Glu Ile Lys
225             230             235
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<210>   6
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<212>   PRT
<213>   Homo sapiens

<400>   6

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Gln Val Lys Leu Gln Glu Ser Gly Ala Glu Leu Val Arg Pro Gly Val
1               5               10              15


Ser Val Lys Ile Ser Cys Lys Gly Ser Gly Tyr Thr Phe Thr Asp Tyr
                20              25              30


Ala Met His Trp Val Lys Gln Ser His Ala Lys Ser Leu Glu Trp Ile
        35              40              45


Gly Val Ile Ser Thr Tyr Tyr Gly Asp Ala Ser Tyr Asn Gln Lys Phe
    50              55              60


Lys Gly Lys Ala Thr Met Thr Val Asp Lys Ser Ser Ser Thr Ala Tyr
65              70              75              80
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3

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Met Glu Leu Ala Arg Leu Thr Ser Glu Asp Ser Ala Ile Tyr Tyr Cys
              85              90              95


Ala Arg Gly Ala Thr Met Ser Tyr Phe Asp Tyr Trp Gly Gln Val Thr
             100             105             110


Thr Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly Val Gly Ser
         115             120             125


Gly Gly Gly Gly Ser Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met
         130             135             140


Ser Ala Ser Pro Gly Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser
145             150             155             160


Ser Ile Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Thr Ser Pro
             165             170             175


Lys Arg Trp Ile Tyr Asp Thr Ser Lys Leu Ala Ser Gly Val Pro Ala
             180             185             190


Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser
         195             200             205


Ser Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys His Gln Arg Ser
         210             215             220


Ser Tyr Pro Phe Thr Phe Gly Gly Gly Ala Lys Leu Glu Ile Lys
225                 230             235


<210>    7
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<213>    Artificial

<220>
<223>    synthetic peptide

<400>    7

Tyr Tyr Glu Phe Arg His
1                   5

<210>    8
<211>    15
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4

<213>   Artificial

<220>
<223>   synthetic peptide

<400>   8

Val His Glu Pro His Glu Phe Arg His Val Ala Leu Asn Pro Val
1   5   10   15

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<211>   3
<212>   PRT
<213>   Artificial

<220>
<223>   synthetic peptide

<400>   9

Lys Leu His
1

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<211>   24
<212>   DNA
<213>   Artificial

<220>
<223>   primer

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<210>   12
<211>   38
<212>   DNA
<213>   Artificial

<220>

<223> primer

<400> 12
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<210> 13
<211> 58
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 13
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<210> 14
<211> 52
<212> DNA
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1   5

<210> 16
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His Gln Arg Ser Ser Tyr Pro Cys Thr
1   5

<210> 17
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6

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<212>  PRT
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<400>  17

His Gln Arg Ser Ser Tyr Pro Phe Thr
1                   5


<210>  18
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<220>
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<400>  18

His Gln Arg Ser Ser Tyr Pro Tyr Thr
1                   5


<210>  19
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<220>
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<400>  19

His Gln Arg Ser Ser Tyr Pro Phe Thr
1                   5


<210>  20
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<220>
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<400>  20

His Gln Arg Ser Ser Tyr Pro Ser Thr
1                   5


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<400> 21

Asp Thr Glu Phe Arg His Ser Ser Asn Asn Phe Ser Ala Val Arg
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<220>
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Ser Thr Glu Phe Arg His Gln Thr Thr Pro Leu His Pro Asn Ser
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<210> 23
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<220>
<223> synthetic peptide

<400> 23

Lys Glu Pro Arg His His Ile Gln His His Glu Arg Val Ile Arg
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<210> 24
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<400> 24

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Gly Gly Ser Gly Gly Val Gly Ser Gly Gly Gly Gly Ser Asp Ile Glu
1   5   10   15

8

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ctc act cag tct cca gca atc atg tct gca tct cca ggg gag aag gtc        96
Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly Glu Lys Val
        20                  25                  30

acc atg acc tgc agt gcc agc tca agt ata agt tac atg cac tgg tat       144
Thr Met Thr Cys Ser Ala Ser Ser Ser Ile Ser Tyr Met His Trp Tyr
        35                  40                  45

cag cag aag cca ggc acc tcc ccc aaa aga tgg att tat gac aca tcc       192
Gln Gln Lys Pro Gly Thr Ser Pro Lys Arg Trp Ile Tyr Asp Thr Ser
        50                  55                  60

aaa ctg gct tct gga gtc cct gct cgc ttc agt ggc agt ggg tct ggg       240
Lys Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
65                  70                  75                  80

acc tct tat tct ctc aca atc agc agc atg gag gct gaa gat gct gcc       288
Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu Asp Ala Ala
                85                  90                  95

act tat tac tgc cat cag cgg agt agt tac cca ttc acg ttc gga ggg       336
Thr Tyr Tyr Cys His Gln Arg Ser Ser Tyr Pro Phe Thr Phe Gly Gly
                100                 105                 110

ggg gcc aag ctg gaa ata aaa                                           357
Gly Ala Lys Leu Glu Ile Lys
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<210>   26
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<400>   26
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Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly Glu Lys Val
        20                  25                  30

Thr Met Thr Cys Ser Ala Ser Ser Ser Ile Ser Tyr Met His Trp Tyr
        35                  40                  45

Gln Gln Lys Pro Gly Thr Ser Pro Lys Arg Trp Ile Tyr Asp Thr Ser
        50                  55                  60

Lys Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly
65                  70                  75                  80

Thr Ser Tyr Ser Leu Thr Ile Ser Ser Met Glu Ala Glu Asp Ala Ala
                85                  90                  95

Thr Tyr Tyr Cys His Gln Arg Ser Ser Tyr Pro Phe Thr Phe Gly Gly
                100                 105                 110

Gly Ala Lys Leu Glu Ile Lys
        115
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